WHAT IS CLAIMED IS:

1. A piezoelectric element comprising:

a plurality of piezoelectric layers comprising a piezoelectric material comprising Sr, Bi, Ti, and O;

at least three vibration electrodes opposing each other, each disposed among the piezoelectric layers; and

an energy-confining region formed in a region in which the vibration electrodes overlap and exciting an n-th order longitudinal thickness vibration;

wherein the maximum length L of a secant between two intersections on the periphery of the energy-confining region and the distance t between the topmost vibration electrode and the bottommost vibration electrode satisfy the ratio $nL/t < 10$, wherein n is greater than 1.

2. A piezoelectric element according to claim 1, wherein the piezoelectric material comprises $SrBi_4Ti_4O_{15}$.

3. A piezoelectric element comprising:

a plurality of piezoelectric layers comprising a piezoelectric material comprising Ca, Bi, Ti, and O;

at least three vibration electrodes opposing each other, each disposed among the piezoelectric layers; and

an energy-confining region formed in a region in which the vibration electrodes overlap and exciting an n-th order longitudinal thickness vibration;

wherein the maximum length L of a secant between two intersections on the periphery of the energy-confining

region and the distance t between the topmost vibration electrode and the bottommost vibration electrode satisfy the ratio $nL/t < 9$, wherein n is an integer greater than 1.

4. A piezoelectric element according to claim 3, wherein the piezoelectric material comprises $CaBi_4Ti_4O_{15}$.

5. A piezoelectric element comprising:

a plurality of piezoelectric layers comprising a piezoelectric material comprising Sr, Bi, Nb, and O;

at least three vibration electrodes opposing each other, each disposed among the piezoelectric layers; and

an energy-confining region formed in a region in which the vibration electrodes overlap and exciting an n-th order longitudinal thickness vibration;

wherein the maximum length L of a secant between two intersections on the periphery of the energy-confining region and the distance t between the topmost vibration electrode and the bottommost vibration electrode satisfy the ratio $nL/t < 10$, wherein n is an integer greater than 1.

6. A piezoelectric element according to claim 5, wherein the piezoelectric material comprises $SrBi_2Nb_2O_9$.

7. A piezoelectric element according to claim 1, wherein the topmost vibration electrode and the

bottommost vibration electrode are formed on the outer surfaces of the piezoelectric layers.

8. A piezoelectric element according to claim 2, wherein the topmost vibration electrode and the bottommost vibration electrode are formed on the outer surfaces of the piezoelectric layers.

9. A piezoelectric element according to claim 3, wherein the topmost vibration electrode and the bottommost vibration electrode are formed on the outer surfaces of the piezoelectric layers.

10. A piezoelectric element according to claim 4, wherein the topmost vibration electrode and the bottommost vibration electrode are formed on the outer surfaces of the piezoelectric layers.

11. A piezoelectric element according to claim 5, wherein the topmost vibration electrode and the bottommost vibration electrode are formed on the outer surfaces of the piezoelectric layers.